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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,732	02/27/2001	Wilhelmus Gerardus Petrus Mooij	82032-0005	9900

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EXAMINER

COLIN, CARL G

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/763,732	<b>Applicant(s)</b> MOOIJ ET AL.	
	<b>Examiner</b> Carl Colin	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 02 December 2004 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/2005 has been entered.

### ***Response to Arguments***

1.1 In response to communications filed on 7/21/2005, applicant has amended claims 1 and 3. The following claims 1-15 are presented for examination.

1.2 Applicant's arguments, pages 6-9, filed on 7/21/2005, with respect to the rejection of claims 1-15 have been fully considered, but they moot in view of a new ground of rejection. Contrarily to applicant's argument, Shear discloses a load module as a secure device applet that provides communication interface for the multimedia player to permit the player to perform a task (see column 8, line 14 through column 9, line 42). Upon further consideration, a new ground of rejection is made. Claims 1, 2, 3, 10, and 15 are now rejected in view of Glover and claims 4-9 and 11-14 are now rejected in view of Glover and Shear. The rejection of the dependent claims not challenged by applicant still applies in this office action.

*Claim Objections*

2. Claims 1 and 10 are objected to because of the following informalities: claim 1 recites: a control device for providing “a protected contents”, which needs to be revised. Claim 10 also recites, receiving “a protected contents”. Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.1 Regarding claims 1, 3, 10, and 15, the limitation "for retrieving the information to decrypt the encrypted data". There is insufficient antecedent basis for this limitation in the claim. It is not clear whether the retrieving is directed to protocol information or attribute data information or other information reciting in the claims. Claims 1, 3, and 10 also recite “the different parts inside the protected contents”. There is insufficient antecedent basis for this limitation in the claim. Also, there is insufficient antecedent basis for the limitation “the appropriate protocol”.

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3.2 Claims 2 and 4 recite “said information protocol”, claim 5 recites “the virtual machine”, claim 7 recites “said interfaces”, claims 8, 12, 13 recite “the type of secure device”. There is insufficient antecedent basis for these limitations in the claims.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4.1 **Claims 3 and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,052,780 to **Glover**.

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4.2 As per claims 3 and 10, **Glover** discloses a method and system for decrypting encrypted data in a DVD player or computer system (content player), comprising an input for receiving digital information (protected contents) (see column 6, line 54 through column 7, line 5), containing encrypted hidden information (encrypted data), keys and passwords (secure device data), labels and location on a virtual device driver for communication between the DVD player (content player) and a secure disk (secure device) (column 7, lines 15-47) that meets the recitation of information on a protocol for communication between the content player and a secure device, for example (see column 9, lines 5-52 and column 10, lines 1-27), and unwrap procedure using tags (attribute data) on the different parts inside the protected contents (column 9, lines 5-52 and column 10, lines 1-27 and lines 60-67); a decryption device (see column 6, lines 54-67) and a processor executing an operating system that meets the recitation of a control device (see column 6, lines 34-54); wherein said secure device data comprises information required to decrypt the encrypted data (column 9, lines 5-52 and column 10, lines 1-27; and column 21, lines 54-67); and discloses unwrap procedure that contains information to locate the appropriate device driver for establishing a communication interface for communication between the DVD player and a secure disk for retrieving the information to decrypt the encrypted data (see column 10, lines 1-27 and column 21, lines 5-52) that meets the recitation of wherein the attribute data comprises information to find in the protected contents information on the appropriate protocol for communication between the decryption device and a secure device for retrieving the information to decrypt the encrypted data. **Glover** discloses wherein the control device is programmed to use said protocol information to establish a communication interface (device driver) between the decryption device and a secure device used with the content player

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wherein the decryption device is suitable for communicating with the secure device as controlled by the protocol information to obtain information required to decrypt the encrypted data (see column 6, line 34 through column 7, line 5; and column 10 and column 19, line 43 through column 20, line 3).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.1 **Claims 1, 2, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,052,780 to **Glover**.

**As per claims 1 and 15, Glover** discloses a system for providing encrypted data to be used in a content player comprising an encryption device for encrypting data using an encryption algorithm (column 3, lines 35-51). **Glover** discloses embodiments for decrypting and executing the protected contents but does not explicitly disclose detail embodiment about the encryption

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process. Claims 1 and 15 recite similar limitations as claims 3 and 10 except for implementing the invention in encryption mode, which is the reverse of the decryption steps of claims 3 and 10. It would have been obvious to one skilled in the art to make such modification because it requires routine skilled in the art to change encryption to decryption or vice-versa. As reciting in claim 15, **Glover** also discloses another embodiment for broadcasting the protected contents (see column 22, lines 1-20) and discloses providing secure device data, and providing information on a protocol for communication between the content player and a secure device, (column 9, lines 5-52 and column 10, lines 1-27 and lines 60-67); and providing a protected contents containing the encrypted data the secure device data, said protocol information and attribute data on the different parts inside the protected contents, wherein said secure device data comprises information required to decrypt the encrypted data (column 9, lines 5-52 and column 10, lines 1-27; and column 21, lines 54-67), and wherein the attribute data comprises information to find in the protected contents information on the appropriate protocol for establishing a communication interface between the content player and the secure device for retrieving the information to decrypt the encrypted data (see column 10, lines 1-27 and column 21, lines 5-52; column 6, line 34 through column 7, line 5; and column 10). Claims 1 and 15 recite similar limitations as found in claims 3 and 10 and therefore they are also rejected on the same rationale as in the rejection of claims 3 and 10.

**As per claim 2, Glover** discloses providing a device driver that meets the recitation of secure device applet containing information on a protocol for communication (column 11, lines 59-65) the device driver is also provided with the protected contents as explained above and



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provided by protection device in the service provider as part of the encryption process (see column 21, lines 5-17 and line 45 through column 22, line 20).

6. **Claims 4-9 and 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,052,780 to **Glover** in view of US Patent 6,157,721 to **Shear et al.**

6.1 **As per claims 4, 5, 11, and 14, Glover** substantially discloses a device driver provided as a secure device applet wherein the processor executing the operating system is programmed to operate as a virtual machine to execute the secure device applet to establish said communication interface (see column 6, line 34 through column 7, line 5 and column 10). **Glover** also suggests authentication and authorization procedures to use the device driver (column 14, lines 35-50 and column 10, lines 1-18) and using any kind of encryption decryption for security and preventing the risk of virus (column 8, lines 61-63, column 3, lines 19-33, column 21, lines 54-67). **Glover** is directed more into making sure that the user environment is authorized to use the driver and does not explicitly disclose authenticating the device driver (applet) for verifying also that only a verified secure driver is loaded into the machine. **Shear et al** in an analogous art discloses a load module (column 3, lines 15-35 and column 8, line 14-50; column 14, lines 39-60; and column 20, lines 1-48) as protected content containing digital signature, keys, specifications, and other load module (secure device applet) (column 2, lines 27-65) wherein the control device comprises an applet loader for verifying the authentication of a secure device applet, wherein only a verified secure device applet is loaded into the virtual machine (column 5, lines 25-67 and column 6, lines 5-62; and column 14, lines 39-60). **Shear et al** discloses providing a load

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module as a secure device applet, wherein the protected processing environments provide secure execution environment programmed to operate as a virtual machine to execute the secure device applet to establish said communication interface, for example (see column 8, line 14-67 and column 5, lines 25-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Glover to also provide authentication of a secure device applet, wherein only a verified secure device applet is loaded into the virtual machine as suggested by **Shear et al** for securing the user protected processing environment against inauthentic applet and to ensure that the applet is intact and was created by a trusted source (see column 4, lines 22-50). One skilled in the art would have been lead to make such a modification to encrypt and authenticate applet whenever they are shared because it would prevent attacks on the user computer/player and secure the user computer/player against inauthentic applet and also ensure that the applet is intact and was created by a trusted source as suggested by **Shear et al** (see column 4, lines 22-50).

**As per claim 6, Glover** discloses the limitation of wherein at least one secure device applet in the protected contents is encrypted, wherein the applet loader is adapted to decrypt an encrypted secure device applet, for example (see column 18, line 56 through column 19, line 14 and line 19 through column 20, line 10 and column 20, lines 35-53).

**As per claim 7, Glover** discloses the limitation of wherein the virtual machine comprises a content player application program interface and a security application program interface, the secure device applet communicating with the content player and the secure device by means of

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said interfaces, for example (see column 10, line 48 through column 11, line 26 and column 6, line 54 through column 7, line 5).

**As per claims 8 and 12**, the combination of **Glover** and **Shear** discloses the limitation of wherein the control device is arranged to determine the type of secure device used in the system/player, wherein the control device is arranged to retrieve a secure device applet from the protected contents corresponding with the type of secure device, for example (see **Shear**, column 16, lines 37-44 and column 18, line 32 through column 19, line 32; see also column 20, line 26 through column 21, line 7). Claims 8 and 12 are also rejected on the same rationale as in the rejection of claims 4, 5, and 11.

**As per claims 9 and 13**, the combination of **Glover** and **Shear** discloses the limitation of wherein the system is part of a content player connected to a network, wherein the control device is arranged to determine the type of secure device used in the system, and wherein the control device is arranged to request a corresponding secure device applet to be downloaded from a service provider, for example (see **Shear**, column 16, lines 37-44; and column 18, line 32 through column 19, line 32; see also column 20, line 26 through column 21, line 7).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses secure content delivery system providing an applet as an interface for controlling the decryption of the content.

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US Patents: 6,418,421 Hurtado et al; 6,055,314 Spies et al ; 5,953,005 Liu ; 6,005,942 Chan et al.

7.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cc

Carl Colin

Patent Examiner

October 14, 2005

  
AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
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